AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently amended) A fingerprint capture device comprising:
- a memory comprised of a plurality of memory cells wherein each memory cell has a corresponding electrical device;
- a fingerprint contact surface disposed substantially coplanar to the memory wherein the fingerprint contact surface has a plurality of conductive paths formed through the fingerprint contact surface and wherein at least some of the conductive paths are substantially directly conductively coupled to at least some of the corresponding electrical devices.

2. (Original) The fingerprint capture device of claim 1 wherein the memory comprises a solid state memory.

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3. (Original) The fingerprint capture device of claim 2 wherein the solid state memory comprises a random access memory.

4. (Original) The fingerprint capture device of claim 3 wherein the random access memory comprises a static random access memory.

5. (Original) The fingerprint capture device of claim 2 wherein the corresponding electrical device comprises a charge storage device.

6. (Original) The fingerprint capture device of claim 1 wherein the memory includes a plurality of conductive surfaces formed on an exterior surface thereof.

7. (Original) The fingerprint capture device of claim 6 wherein some of the plurality of conductive surfaces are each electrically coupled to a corresponding one of the corresponding electrical devices.

8. (Original) The fingerprint capture device of claim 6 wherein some of the plurality of conductive surfaces are electrically coupled to a common rail.

9. (Original) The fingerprint capture device of claim 6 wherein some of the plurality of conductive surfaces are each electrically coupled to a corresponding one of the corresponding electrical devices and some of the plurality of conductive surfaces are electrically coupled to a common rail.

10. (Original) The fingerprint capture device of claim 1 wherein the fingerprint contact surface comprises an epoxy material.

11. (Original) The fingerprint capture device of claim 10 wherein at least some of the conductive paths are comprised of conductive spheres.

12. (Original) The fingerprint capture device of claim 11 wherein at least some of the conductive spheres present a substantial resistance to current flow.

13. (Original) The fingerprint capture device of claim 12 wherein at least some of the conductive spheres are comprised of nickel oxide.

14. (Original) The fingerprint capture device of claim 11 wherein at least a portion of some of the conductive spheres physically contacts the memory.

15. (Original) The fingerprint capture device of claim 14 wherein at least a portion of some of the conductive spheres is physically exposed to an exterior of the fingerprint contact surface.

16. (Original) The fingerprint capture device of claim 11 wherein at least some of the conductive spheres physically contacts the memory and have a portion that is physically exposed to an exterior of the fingerprint contact surface.

17. (Original) The fingerprint capture device of claim 11 wherein at least a plurality of the conductive spheres have a diameter of approximately seven millionths of a meter.

18. (Currently amended) A device comprising:
- a random access memory comprising an array of memory cells and having exposed conductive pads substantially directly electrically coupled to the memory cells;
- anisotropic cured conductive epoxy disposed over at least a plurality of the exposed conductive pads wherein at least a majority of the anisotropic cured conductive epoxy is exposed.

19. (Original) The memory device of claim 18 wherein the anisotropic cured conductive epoxy has a plurality of conductive paths formed therethrough.

20. (Original) The memory device of claim 19 wherein at least some of the conductive paths are electrically coupled to at least some of the exposed conductive pads.

21. (Original) The memory device of claim 20 wherein at least some of the conductive paths are comprised of conductive spheres.

22. (Original) The memory device of claim 21 wherein at least some of the conductive spheres present a substantial resistance to current flow.

23. (Original) The memory device of claim 22 wherein at least some of the conductive spheres are formed of nickel oxide.

24. (Original) The memory device of claim 18 wherein the anisotropic cured conductive epoxy comprises a fingerprint contact surface.

25. (Original) A device comprising a cured epoxy having discrete conductive elements disposed therein wherein at least a majority of the discrete conductive elements present a substantial resistance to current flow and are at least partially exposed on either side of the cured epoxy.

26. (Original) The device of claim 25 wherein a plurality of the discrete conductive elements are comprised of conductive spheres.

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27. (Original) The device of claim 26 wherein a plurality of the conductive spheres are comprised of nickel oxide.

28. (Original) The device of claim 26 wherein a plurality of the conductive spheres are about seven millionths of a meter in diameter.

29. (Original) The device of claim 25 and further comprising a memory that is physically and electrically coupled to the cured epoxy.

30. (Original) The device of claim 29 wherein the memory includes a plurality of electrically conductive surfaces that are electrically coupled to memory cells in the memory and that physically contact the cured epoxy.

31. (Original) The device of claim 30 wherein at least some of the discrete conductive elements electrically and physically contact at least some of the electrically conductive surfaces of the memory.

32. (Currently amended) A method for sensing and storing tactile impressions information comprising:
- providing a memory comprised of a plurality of memory cells wherein each memory cell has a corresponding electrical device;
- providing a contact surface disposed substantially coplanar to the memory wherein the contact surface has a plurality of conductive paths formed through the contact surface and wherein at least some of the conductive paths are substantially directly conductively coupled to at least some of the corresponding electrical devices;
- placing an object having a surface with asperities on the contact surface;
- simultaneously sensing and storing in the memory tactile impressions information regarding at least some of the asperities by discharging at least some of the electrical devices as correspond to locations where asperities directly contact the contact surface.

33. (Original) The method of claim 32 wherein providing a memory comprised of a plurality of memory cells wherein each memory cell has a corresponding electrical device includes providing a memory comprised of a plurality of memory cells wherein each memory cell has a corresponding charge storage device.

34. (Original) The method of claim 32 wherein providing a contact surface disposed substantially coplanar to the memory wherein the contact surface has a plurality of conductive paths formed through the contact surface includes providing a contact surface disposed substantially coplanar to the memory wherein the contact surface has a plurality of conductive spheres disposed therein which conductive spheres comprise conductive paths.

35. (Original) The method of claim 34 wherein discharging at least some of the electrical devices includes discharging at least some of the electrical devices through at least some of the conductive spheres.

36. (Original) The method of claim 32 and further comprising dissipating electrostatic discharge within at least some of the conductive paths.

37. (Original) The method of claim 32 and further comprising storing in the memory a reference set of data representing tactile impressions information against which subsequently sensed and stored tactile impressions information is to be compared.

38. (Original) A method for sensing and storing fingerprint information comprising:
- providing a memory comprised of a plurality of memory cells wherein each memory cell has a corresponding charge storage device and wherein the memory further includes a plurality of conductive pads disposed on a surface thereof such that some of the conductive pads are electrically coupled to at least one of the charge storage devices and some of the conductive pads are electrically coupled to a common rail;
- providing a contact surface formed at least in part of cured epoxy and being disposed substantially coplanar to the memory wherein the contact surface has a plurality of conductive spheres disposed at least partially within the contact surface and wherein at least some of the conductive spheres are conductively coupled to at least some of the conductive pads;
- placing an object having fingerprint features on the contact surface;
- simultaneously sensing and storing in the memory fingerprint information regarding at least some of the fingerprint features by discharging at least some of the charge storage devices as correspond to locations where fingerprint features directly contact the contact surface through a discharge path that includes a conductive pad as coupled to a charge storage device to be discharged, at least a first conductive sphere, the object, at least a second conductive sphere, and a conductive pad as coupled to the common rail.

39. (Original) The method of claim 38 wherein providing a contact surface having a plurality of conductive spheres includes providing a contact surface having a plurality of conductive spheres comprised of nickel oxide.

40. (Original) A method of forming a device to simultaneously sense and store tactile information regarding asperities of an object comprising:
- providing a memory having exposed conductive pads on a surface thereof;
- disposing an epoxy material having discrete conductive elements disposed therein on at least a portion of the surface to thereby contact and at least partially cover at least one of the exposed conductive pads;
- compressing at least part of the epoxy material to thereby cause at least one of the discrete conductive elements to physically contact a conductive pad;
- curing the epoxy material to harden the epoxy material and to shrink the epoxy material such that at least a portion of at least some of the discrete conductive elements are exposed.

41. (Original) The method of claim of 40 and further comprising treating at least exposed portions of the discrete conductive elements to improve electrical conductivity between the discrete conductive elements and an object placed in contact with the epoxy material.

42. (Original) The method of claim 40 wherein providing a memory having exposed conductive pads on a surface thereof includes providing a memory comprised of a plurality of memory cells wherein each memory cell has a corresponding charge storage device and wherein the memory further includes a plurality of conductive pads disposed on a surface thereof such that some of the conductive pads are electrically coupled to at least one of the charge storage devices and some of the conductive pads are electrically coupled to a common rail.

43. (Original) The method of claim 40 wherein disposing an epoxy material having discrete conductive elements disposed therein includes disposing an epoxy material having discrete conductive elements comprising conductive spheres disposed therein.

44. (Currently amended) A method for sensing and storing tactile impressions information comprising:

- providing a plurality of discrete memory units, each of the memory units being comprised of a plurality of memory cells wherein each memory cell has a corresponding electrical device;
- providing a contact surface disposed substantially coplanar to at least some of the memory units wherein the contact surface has a plurality of conductive paths formed through the contact surface and wherein at least some of the conductive paths are substantially directly conductively coupled to at least some of the corresponding electrical devices for a plurality of the memory units;
- placing an object having a surface with asperities on the contact surface;
- simultaneously sensing and storing in at least a plurality of the memory units tactile impressions information regarding at least some of the asperities by discharging at least some of the electrical devices as correspond to locations where asperities directly contact the contact surface.

45. (Original) The method of claim 44 wherein providing a plurality of discrete memory units, each of the memory units being comprised of a plurality of memory cells wherein each memory cell has a corresponding electrical device includes providing a plurality of discrete memory units, each of the memory units being comprised of a plurality of memory cells wherein each memory cell has a corresponding charge storage device.

46. (Original) The method of claim 44 wherein providing a contact surface disposed substantially coplanar to at least some of the memory units wherein the contact surface has a plurality of conductive paths formed through the contact surface includes providing a contact surface disposed substantially coplanar to at least some of the memory units wherein the contact surface has a plurality of conductive spheres disposed therein which conductive spheres comprise conductive paths.

47. (Original) The method of claim 46 wherein discharging at least some of the electrical devices includes discharging at least some of the electrical devices through at least some of the conductive spheres.

48. (Original) The method of claim 47 and further comprising dissipating electrostatic discharge within at least some of the conductive paths.

49. (Currently amended) A fingerprint capture device comprising:
- a memory comprised of a plurality of discrete memory units, wherein each memory unit is comprised of memory cells, wherein each memory cell has a corresponding electrical device;
- a fingerprint contact surface disposed substantially coplanar to at least some of the memory units wherein the fingerprint contact surface has a plurality of conductive paths formed through the fingerprint contact surface and wherein at least some of the conductive paths are substantially directly conductively coupled to at least some of the corresponding electrical devices.

50. (Currently amended) A mechanism having an enabled state and a disabled state, comprising:
- a memory comprised of a plurality of memory cells wherein each memory cell has a corresponding electrical device;
- a fingerprint contact surface disposed substantially coplanar to the memory wherein the fingerprint contact surface has a plurality of conductive paths formed through the fingerprint contact surface and wherein at least some of the conductive paths are substantially directly conductively coupled to at least some of the corresponding electrical devices;
- a processor operably coupled to the memory and being programmed to switch between the enabled state and the disabled state as a function, at least in part, of memory contents in the memory as entered through the fingerprint contact surface.

51. (Original) The mechanism of claim 50 wherein the mechanism comprises one of:

- a projectile weapon;
- a barrier operator;
- a communications device;
- a smartcard; and
- a computer.